Air Quality Permitting
Technical Analysis

Tier II Operating Permit and Permit to Construct

AIRS Facility No. 777-00106

Permit No. T2-020031

IDAHO CONCRETE CO. INC.
EAGLE, IDAHO

Prepared By

Robert Baldwin
Permit Writer

Bill Rogers
Regional Permit Program Coordinator

Date Prepared

July 7, 2003

Permit Status

FINAL

ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
CO	carbon monoxide
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
HAPs	hazardous air pollutants
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
MACT	Maximum Available Control Technology
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_X	nitrogen oxides
NSPS	New Source Performance Standards
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PM, PT	particulate matter
PSD	Prevention of Significant Deterioration
PTC	permit to construct
SIP	State Implementation Plan
SO_2	sulfur dioxide
T/yr	tons per year
UTM	Universal Transverse Mercator
VOC	volatile organic compound

PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01.400-470 and 58.01.01.200-228, *Rules for the Control of Air Pollution in Idaho*, for Tier II operating permits and for permits to construct, respectively.

PROJECT DESCRIPTION

This project is for the issuance of a facility-wide Tier II operating permit and permit to construct for Idaho Concrete Co., located in Eagle, to satisfy the requirements of the Northern Ada County PM_{10} Maintenance Plan.

FACILITY DESCRIPTION

Idaho Concrete Co., formerly Monroc Concrete, produces concrete by mixing cement, sand, and aggregate according to the specifications of their customers. Sand and aggregate are generally stockpiled while the cement is stored in a silo. When the cement silo is being filled, the exhaust air from the silo passes through a baghouse. The fugitive dust generated from the other various activities involved in the production of concrete are controlled by applications of dust suppressants such as water. Electrical power is supplied by the local utility.

SUMMARY OF EVENTS

On February 4, 2000, DEQ issued Monroc Concrete a PTC for the production of concrete. On June 3, 2002, DEQ received a letter stating that Staker and Parsons Co. had purchased Monroc Concrete and would be operating under the business name of Idaho Concrete Co. As part of the Northern Ada County PM_{10} Maintenance Plan, DEQ required that Idaho Concrete Co. apply for a facility-wide Tier II operating permit and permit to construct (Facility-wide permit). The goal of this permit is to limit allowable emissions (those established in the February 4, 2000 PTC) to a level that more accurately reflects actual emission, thus providing an enforceable, air shed-based, emissions reduction. The proposed Facility-wide permit was provided for public comment from September 11 through October 10, 2002 as required by IDAPA 58.01.01.404.02.b. No comment were received.

DISCUSSION

1. Emission Estimates

   Idaho Concrete Co.'s February 4, 2000 PTC allows the facility to produce 876,000 cubic yards of concrete per year, and emit 99 tons of PM_{10} per year. In order to meet the goal of the PM_{10} maintenance plan, throughput has been reduced to 500,000 cubic yards per year, and PM_{10} emissions have been reduced to 20 T/yr. The reduction in emissions is made enforceable by requiring the use of fugitive dust control strategies and requiring that a baghouse be used to capture PM_{10} emissions whenever the cement storage silo is filled.

2. Modeling

   Modeling, for the purposes of the PM_{10} maintenance plan, included the point source emissions (cement storage silo baghouse) and associated fugitive dust emissions (transfer points, haul roads, and stockpiles). Upon issuance of the Facility-wide permit, this facility's potential to emit will be limited to 20 tons of PM_{10} per year. When modeled, this emission rate satisfies the requirements of the Northern Ada County PM_{10} Maintenance Plan.

3. Area Classification

This facility is located in Northern Ada County, which is located within AQCR 64 and UTM Zone 11. This area is unclassifiable for all regulated criteria air pollutants.

4. Facility Classification

This facility is not a major facility as defined by IDAPA 58.01.01.006.55 or 008.14. The facility is not a designated facility as defined in IDAPA 58.01.01.006.27. The facility is not subject to federal NSPS, NESHAP, or MACT requirements. The AIRS facility classification is SM because actual and potential emissions are limited to less than 100 T/yr for all air pollutants. The SIC code defining the facility is 3273.

5. AIRS

AIRS/AFS FACILITY-WIDE CLASSIFICATION[a] DATA ENTRY FORM

AIR PROGRAM / POLLUTANT	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	TITLE V	AREA CLASSIFICATION A – Attainment U – Unclassifiable N – Nonattainment
SO_2	SM	B				B	U
NO_x	SM	B				B	U
CO	SM	B				B	U
PM_{10}	SM	B				B	U
PT (Particulate)	SM	B				B	U
VOC	SM	B				B	U
THAP (Total HAPs)							
			APPLICABLE SUBPART				

[a] AIRS/AFS Classification Codes:
A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For NESHAP only, class "A" is applied to each pollutant which is below the 10 T/yr threshold, but which contributes to a plant total in excess of 25 T/yr of all NESHAP pollutants.
SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.
B = Actual and potential emissions are below all applicable major source thresholds.
C = Class is unknown.
ND = Major source thresholds are not defined (e.g., radionuclides).

FEES

Tier II operating permit processing fees apply to this facility in accordance with IDAPA 58.01.01.407. Idaho Concrete Co. is being issued a synthetic minor operating permit. In accordance with IDAPA 58.01.01.407, the processing fee for a synthetic minor operating permit is $10,000. The DEQ will send Idaho Concrete Co. a fee assessment which is due within 45-days of receipt of the assessment.

RECOMMENDATION

Based on the review of the application materials and all applicable state and federal regulations, staff recommends that DEQ issue Tier II Operating Permit and Permit to Construct No. T2-020031 to Idaho Concrete Co.

REB/BR:br Permit No. T2-020031